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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/724,494	11/28/2003	Jie Liang	TI-36793	1020

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EXAMINER	
LEE, JOHN J	
ART UNIT	**PAPER NUMBER**
2618	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/06/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/724,494	LIANG, JIE	
	Examiner	Art Unit	
	JOHN J. LEE	2618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *02 January 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-12* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-5 and 8-12* is/are rejected.

7)☒ Claim(s) *6 and 7* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments/Amendment

1. Applicant's arguments with the affidavits (Declaration Under 37 C.F.R. 1.131) received on January 2, 2007 have been carefully considered but they are not persuasive. Therefore, the finality of this Office Action is deemed proper.

2. The affidavits filed on January 2, 2007 under 37 CFR 1.131 has been considered but is ineffective to overcome the US Patent 6,622,017 reference.

3. The evidence submitted is insufficient to establish a reduction to practice of the invention in this country or a NAFTA or WTO member country prior to the effective date of the US Patent 6,622,017 reference. It appears that the applicants show evidence of concept of the invention without establishing a reduction to practice of the inventions.

The affidavit or declaration must state FACTS and produce such documentary evidence and exhibits in support thereof as are available to show conception and completion of invention in this country or in a NAFTA or WTO member country (MPEP § 715.07(c)), at least the conception being at a date prior to the effective date of the reference. Where there has not been reduction to practice prior to the date of the reference, the applicant or patent owner must also show diligence in the completion of his or her invention from a time just prior to the date of the reference continuously up to the date of an actual reduction to practice or up to the date of filing his or her application (filing constitutes a constructive reduction to practice, 37 CFR 1.131). The showing of facts must be sufficient to show:

(1) reduction to practice of the invention prior to the effective date of the reference; or

(2) conception of the invention prior to the effective date of the reference coupled with due diligence from prior to the reference date to a subsequent (actual) reduction to practice; or

(3) conception of the invention prior to the effective date of the reference coupled with due diligence from prior to the reference date to the filing date of the application (constructive reduction to practice). See 37 CFR 1.131. See MPEP § 715 and MPEP § 2138.04 through § 2138.06 for a detailed discussion of the concepts of conception, reasonable diligence, and reduction to practice.

4. The evidence submitted is insufficient to establish a conception of the invention prior to the effective date of the US Patent 6,622,017 reference. While conception is the mental part of the inventive act, it must be capable of proof, such as by demonstrative evidence or by a complete disclosure to another. Conception is more than a vague idea of how to solve a problem. The requisite means themselves and their interaction must also be comprehended. See *Mergenthaler v. Scudder*, 1897 C.D. 724, 81 O.G. 1417 (D.C. Cir. 1897). The showing of facts shall be such, in character and weight, as to establish reduction to practice prior to the effective date of the reference, or conception of the invention prior to the effective date of the reference coupled with due diligence from prior to said date to a subsequent reduction to practice or to the filing of the application. Original exhibits of drawings or records, or photocopies thereof, must accompany and form part of the affidavit or declaration or their absence satisfactorily explained.

The affidavits (Declaration Under 37 C.F.R. 1.131) received on January 2, 2007 is improper because there is no Applicant's signature in the Form.

5. Re claims 1 and 8: Applicant argues that teaching of the Simpson et al (US 2005/0128988) does not teach the claimed invention "processing a packet at the time interval". However, The Examiner respectfully disagrees with Applicant's assertion that the teaching of Simpson does not teach the claimed invention. Contrary to Applicant's assertion, the Examiner is of the opinion that Simpson teaches beacon signals are intended to be transmitted at the end of each interval, individual beacon signals may be delayed because of a transmission of high-priority voice packets or data packets, a transmission os a long frame that extends past a target beacon transmission time (see pages 4, paragraphs 40 and Fig. 3), regarding the claimed limitation.

Applicant's attention is directed to the rejection below for the reasons as to why this limitation is not patentable.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. **Claims 1, 2, 4, 8, and 10-12** are rejected under 35 U.S.C. 102(e) as being anticipated by Simpson et al. (US 2005/0128988).

Regarding **claim 1**, Simpson discloses that a method of conserving power in a WLAN receiver (pages 4, paragraphs 35 – 38, Fig. 1, and page 1, paragraphs 8 – pages 2, paragraphs 15, where teaches allows the WLAN device to conserve power between times

when it must receive or transmit). Simpson teaches that determining processing tasks (processing scanning tasks of the data packets) that need only to be operated for a brief period of time (time interval period) during the reception of a received packet (pages 4, paragraphs 34 – 40 and Fig. 1, 2, where teaches determining scanning process tasks to operate for the time interval of time during reception of the received high-priority voice packets or data packets). Simpson teaches that enabling said processing tasks (processing scanning tasks of the data packets) only during said brief period of time of said received packet (pages 4, paragraphs 34 – 40 and Fig. 1, 2, where teaches determining scanning process tasks to operate for the time interval of time during reception of the received high-priority voice packets or data packets and processing scan tasks within the period).

Regarding **claim 2**, Simpson discloses that the enabling step includes providing multiple control signals (multiple prove signals) for enabling and disabling said processing tasks controlled by a state machine that determines the state of the receiver (pages 4, paragraphs 34 – 40 and Fig. 1, 2, where teaches the receiver station provides a prove signal containing multiple control signals for instruction of processing tasks).

Regarding **claim 4**, Simpson discloses that the processing tasks includes radio control setting and said radio control setting processing task is disabled after the preamble of said packet (pages 4, paragraphs 34 – 40 and Fig. 1, 2, where teaches the processing tasks including radio transmitter/receiver within the mobile station contains a scanner for scanning one or more channels for beacon signals and control processing task can be instructed aborted after the expiring the period).

Regarding **claim 8**, Simpson teaches all the limitation, as discussed in the claims 1 and 2. Furthermore, Simpson teaches that a plurality of modules for performing processing tasks (Fig. 5 and pages 6, paragraphs 57 – 62, where teaches a plurality of modules coupled with controller for performing processing scanning tasks). Simpson teaches that a clock (558 in Fig. 5) with multiple clock zones for the multiple tasks (Fig. 5 and pages 6, paragraphs 57 – 62, where teaches a scan start time may be set and stored in a set of timer). Simpson teaches that a state machine for determining the state of signal processing of a received packet (Fig. 5, 6 and pages 6, paragraphs 59 – pages 7, paragraphs 68, where teaches receiver station for determining the state (active or passive state or low power mode or high power mode) of signal processing of the received packet data). Simpson teaches that the clock coupled to said modules (the timer coupled modules in Fig. 5) and responsive to the state of the state machine for disabling said modules when processing is complete for each packet (Fig. 5, 6 and pages 6, paragraphs 57 – 62, where teaches a scan start time may be set and stored in a set of timer and based on the scan start time, mobile station may determine a power mode and enter into a low power mode when sufficient time is available before receiving the next beacon signal or GPR).

Regarding **claim 10**, Simpson teaches all the limitation, as discussed in the claims 4 and 8.

Regarding **claim 11**, Simpson teaches all the limitation, as discussed in the claims 4 and 8.

Regarding **claim 12**, Simpson teaches all the limitation, as discussed in the claims 4 and 8. Furthermore, Simpson further teaches that a channel estimator operated only

during the preamble of each packet (Fig. 5, 6 and pages 6, paragraphs 57 – 62, where teaches a scan start time may be set and stored in a set of timer and based on the scan start time, estimator of mobile station may determine a power mode and enter into a low power mode when sufficient time is available before receiving the next beacon signal or GPR).

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

9. **Claims 3, 5, and 9** are rejected under 35 U.S.C. 103(a) as being unpatentable over Simpson in view of Brown et al. (US 6,366,622).

Regarding **claims 3, 5, and 9**, Simpson does not specifically disclose the limitation "the processing tasks include automatic gain control (AGC) and said AGC processing task is disabled after AGC settles for each packet, and the processing tasks include frequency offset correction and said frequency offset correction processing task is disabled after short sequence processing of each packet". However, Brown teaches the limitation "the processing tasks include automatic gain control (AGC) and said AGC processing task is disabled after AGC settles for each packet, and the processing tasks include frequency offset correction and said frequency offset correction processing task is

disabled after short sequence processing of each packet" (column 11, lines 4 – column 12, lines 30, Fig. 5, 9, and column 17, lines 54 – column 18, lines 52, where teaches the processing including automatic gain control (AGC) and AGC is not necessary to perform and can be eliminated or substantially eliminated in the radio within inactive period, and the digital processing stage performs frequency offset correction and said frequency offset correction processing task during inactive period, after processing of the packet). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the Simpson system as taught by Brown, provide the motivation to achieve reducing power consumption in wireless communication terminal.

Allowable Subject Matter

10. Claims 6 and 7 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The prior art of record fails to disclose "the processing tasks include automatic gain control, radio control setting and frequency offset processing and said automatic gain control, radio control setting and frequency offset processing are disabled after each has completed its processing task for each packet" as specified in the claims.

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Conclusion

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231
Or P.O. Box 1450
Alexandria VA 22313

or faxed (571) 273-8300, (for formal communications intended for entry)

Or: (703) 308-6606 (for informal or draft communications, please label "PROPOSED" or "DRAFT").

Hand-delivered responses should be brought to USPTO Headquarters, Alexandria, VA.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **John J. Lee** whose telephone number is **(571) 272-7880**. He can normally be reached Monday-Thursday and alternate Fridays from 8:30am-5:00 pm. If attempts to reach the examiner are unsuccessful, the examiner's supervisor, **Edward Urban**, can be reached on **(571) 272-7899**. Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-4700.

J.L
March 31, 2007

John J Lee

EDWARD F. URBAN
SUPERVISORY PATENT EXAMINER
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